The aims of this study were to examine rates and risk factors for prolonged grief and to investigate the association between prolonged grief and depression. The authors interviewed a heterogeneous bereaved sample of 61 Germans, 6 of whom had prolonged grief and depression, respectively. The 2 syndromes were strongly linked to one another. Risk factors for prolonged grief were being a woman and having high levels of religious beliefs and low levels of satisfaction with one's religious beliefs, emotional closeness to the deceased, and unanticipated loss. Symptoms of prolonged grief may endure years post-loss and often overlap with depression.

After the death of a loved one, a significant minority of bereaved people experience prolonged grief reactions, known as prolonged grief disorder (PGD). Diagnostic criteria for PGD (Prigerson et al., 2009; Prigerson, Vanderwerker, & Maciejewski, 2008) include reactions involving separation distress (e.g., yearning, intrusive thoughts, intense pangs) and cognitive, emotional and behavioral symptoms (feeling emotionally numb, stunned, or that life is meaningless; confusion about one's role in life or a diminished sense of self; mistrust of others; difficulty accepting or avoiding the reality or bitterness over the loss; and difficulty moving on with life). These symptoms occur at least daily or to a distressing or disruptive degree, last for at least 6 months, and cause significant functional impairment in social, occupational, or other important areas of life. Estimates of the prevalence of PGD of different study populations 6 months to 3 years post-loss vary between 12% and 43% (Goldsmith, Morrison, Vanderwerker, & Prigerson, 2008; Hargrave, Leathem, & Long, 2012; Tomarken et al., 2012).

Researchers debate whether PGD is separate from other forms of psychiatric disorders. Some research indicates that PGD is different from depression and anxiety (Boelen & Prigerson, 2007; Dillen, Fontaine, & Verhofstadt-Denève, 2009). Other research indicates that PGD is not distinct from depression (Hogan, Worden, & Schmidt, 2004). Some experts consider a formal PGD diagnosis as a risk of pathologizing a normal and universal reaction, thus giving the impression that anything that causes distress also requires psychological intervention (Collier, 2011).

Most existing grief studies have been conducted in the United States or the Netherlands and involved clinical samples or specific subgroups. Only one study investigated rates of PGD in a German sample; it found a prevalence rate of 7%, with a mean of 10 years post-loss (Kersting, Brähler, Glaesmer, & Wagner, 2011). Replication of these results with the proposed diagnostic criteria would support PGD as a formal diagnosis. Thus, a goal of the present investigation was to determine rates of PGD and depression among a heterogeneous bereaved German community sample who had been bereaved for different reasons and to examine the association between PGD and depression.

Severity of grief varies depending on several risk factors. Some research supports the positive effects of religious beliefs on bereavement (Becker et al., 2007). Many individuals view religion as helpful in coping with the loss of a loved one (Frantz, Trolley, & Johll, 1996). However, the fact that individuals often claim that religious beliefs and practices may be helpful in coping with stressful life events does not demonstrate an actual relationship between religion and adjustment. Furthermore, only a minority of studies differentiate between religious beliefs and religious activities (Brown, Nesse, House, & Utz, 2004). Religious activities might facilitate adjustment due to increased perception of social support (McIntosh,
Silver, & Wortman, 1993). The present study tried to overcome this deficiency and investigated religious beliefs, satisfaction with one’s religious beliefs, and religious activities as potential risk factors for PGD symptoms and expected that high levels of all measures of religiosity would be associated with fewer PGD symptoms.

Many researchers argue that closeness to the deceased is relevant to grief intensity (Brent et al., 1992; Servaty-Seib & Pistole, 2006). Indeed, closeness—rather than kinship—is salient to grief intensity (Archer, 1999). We hypothesized that high levels of perceived emotional closeness to the lost person would be related to PGD symptoms.

Several studies have shown that unexpected death and lack of preparedness for death is associated with higher levels of grief than an expected death (Goldsmith et al., 2008; Wijngaards-de Meij et al., 2005). Therefore, the current study aimed to include a sample of mourners who varied considerably in time since the loss. We predicted that the amount of time since the death would have less PGD symptoms.

Time since loss is inversely related to grief severity (Schaal, Jacob, Dusingizemungu, & Elbert, 2010). However, most studies have sampled bereaved persons using no substantial variability in the time since the loss (e.g., Holland, Currier, & Neimeyer, 2006; Prigerson et al., 2002). Therefore, the current study aimed to include a sample of mourners who varied considerably in time since the loss. We predicted that the amount of time since the loss would be significantly associated with PGD.

METHOD

Participants

In the present study, 61 participants (38 women, 23 men) completed the diagnostic interview. Their mean age was 65.88 years (SD = 15.10, range: 15–89 years). Participants indicated they were widowed (n = 33, 54.1%), married (n = 17, 27.9%), single (n = 6, 9.8%), or divorced (n = 5, 8.2%). Their education was high school (n = 33, 54.1%), middle school (n = 21, 34.4%), and gymnasium (n = 16, 26.2%). The participants were Catholic (n = 39, 63.9%), Protestant (n = 17, 27.9%), or without any religion (n = 5, 8.2%). The most disturbing loss was the partner for 52.5% (n = 32), a child for 16.4% (n = 10), the mother for 14.8% (n = 9), the father for 8.2% (n = 5), a sibling for 4.9% (n = 3), and another person for 3.86% (n = 2). The mean time since the death was 5.57 years (SD = 9.52, range: 1–57). Death was caused by illness (70.5%, n = 43), age (18.0%, n = 11), accident (6.6%, n = 4), or suicide (4.9%, n = 3); about half of the participants reported that the death was sudden (52.5%, n = 32); preparedness scale, M = 5.48, SD = 3.86; range: 0–10). About half of all participants indicated that the person associated with the prolonged grief-related death was the person who was emotionally closest to the bereaved (52.5%, n = 32; emotional closeness scale, M = 8.93, SD = 1.38; range: 5–10).

Materials

The Prolonged Grief Disorder questionnaire (PG-13; Prigerson et al., 2009; Prigerson et al., 2008) is a structured diagnostic interview designed to assess the 11 potential PGD symptoms over the previous month. Interviewees rate each item on a 5-point scale ranging from 1 (never/not at all) to 5 (several times a day/severe). The prolonged grief score includes the sum of the score of each of the 11 grief symptoms with a range of 11 to 55 (Cronbach’s alpha in this study = 0.84). Prigerson and colleagues (2009) provided psychometric validation, demonstrating high sensitivity and specificity; also, the PG-13 has been reliable (Cronbach’s alpha = 0.91; Boelen, 2011). A PGD diagnosis requires that one of the proposed two separation distress symptoms and five of the nine proposed cognitive, emotional, and behavioral symptoms receive a score of at least four (at least once a day or marked). Also, respondents indicated the loss that was the most disturbing to them and to which the PG-13 referred to (prolonged grief-related death), the cause of the most disturbing death, and passed time since this loss. Interviewees reported perceived emotional closeness to the lost person on a 10-point scale ranging from 1 (not at all) to 10 (extreme), and perceived suddenness of the loss on a 10-point scale ranging from 1 (extreme) to 10 (not at all). Possible values for both range from 1 to 10.

The brief German instrument of religiosity (Mehnert & Koch, 2001) consists of 21 items answered from 1 (strongly disagree) to 6 (strongly agree). It has two subscales: religious beliefs and satisfaction with one’s religious beliefs. Factor analytic investigations identified these two dimensions and demonstrated good characteristics of validity and high internal consistencies; Cronbach’s alpha = 0.95 and 0.78, respectively (Mehnert & Koch, 2001). Cronbach’s alphas for the two subscales in this study were 0.92 and 0.83, respectively. To assess religious activities, participants were asked, “How often did you participate in religious activities in the past week?”, which included the frequency of attending church and private religious activities.

The Hopkins Symptom Checklist-25 (Lee, Kaaya, Mbwambo, Smith-Fawzi, & Leshabari, 2008) includes 15 items measuring depression scored on a 4-point scale ranging from 1 (not at all bothered) to 4 (extremely bothered). Possible values range from 15 to 60 (Cronbach’s alpha in this study = 0.84).

The Mini-International Neuropsychiatric Interview (MINI; Sheehan et al., 1998) was used to assess major depressive disorder (MDE). The MINI assesses the nine DSM-IV symptom criteria (yes/no) for MDE and refers to the past two weeks (Cronbach’s alpha in this study = 0.74). It succeeds in regards to reliability and...
validity in eliciting symptom criteria of depression and its usefulness as a screening tool has been demonstrated in various cross-cultural settings (Sheehan et al., 1998). All diagnostic instruments (including the self-rating scales) were administered as clinical interviews.

Procedure

The study was conducted in Konstanz, Germany from November 2010 until January 2011. It was approved by the University of Konstanz Ethical Review Board. Eligible participants were individuals who had lost a first-degree relative (child, spouse or parent) within the previous four years. The recruitment was carried out with the help of public death notices appearing from January 2006 until March 2010 in the local newspaper of Konstanz (Südkurier). For each year between 2006 and 2010, the first three months were systematically screened until approximately 15 bereaved persons per month and year could be obtained. During the recruitment period, a total of 196 letters were sent to eligible individuals; in 32 cases either the address was incorrect, the person was not a first-degree relative or the person had the same last name but nothing to do with the loss. Of the 164 persons correctly identified who fulfilled inclusion criteria, 61 (37.2%) agreed to be interviewed, 103 (62.8%) declined. Reasons for nonparticipation included time restrictions, no interest in general, having come to terms with the loss, and fear of being newly confronted with the loss.

Interviews were conducted individually by two female psychologists (Susanne Schaal and Anne Richter) at the University of Konstanz or at the homes of the participants. All participants were provided with an information sheet explaining the aims of the study and all signed consent forms. After the interview, participants were reimbursed 15 Euros for their participation. The interviews lasted about two hours.

RESULTS

For PGD, six (9.8%) of the 61 met criteria; the mean of the prolonged grief score was 22.13 (SD=7.9, range: 11–45). Hence, the severity of PGD was modest. Also, 41 (67.2%) reported at least one symptom of separation distress, 6 (9.8%) reported at least five cognitive, emotional, or behavioral symptoms, 58 (95.1%) indicated that the symptoms had been present for at least six months and 14 (23.0%) reported a significant functional impairment caused by the symptoms. Overall, few people met full criteria for PGD, though over half reported a small number of symptoms.

For MDE, 6 (9.8%) met criteria; the mean depression score was 22.77 (SD=6.16; range: 15–44). Three persons who met the diagnostic criteria for PGD also fulfilled comorbid diagnostic criteria for MDE. Likewise, few people met full criteria for depression.

A significant correlation was present between the prolonged grief score and the depression score (r=.62, p<.001). Thus, there was some overlap between prolonged grief and depression.

As we assumed a potential overlap between the different predictor variables of prolonged grief disorder, we conducted a hierarchical linear regression analysis. Results are presented in Table 1. The control variables age and gender were entered in Step 1, followed by religiosity in Step 2, and death-specific variables (“emotional closeness to the deceased”, “perceived suddenness of the death” and “years since the loss”) in Step 3. Age and gender were not associated with symptoms of PGD. Controlling for age and gender, results of step 2 demonstrated a significant impact of religious beliefs and satisfaction with one’s religious beliefs, such that participants with higher levels of PGD were more likely to report high levels of religious beliefs and low levels of satisfaction with one’s religious beliefs. Step 3 revealed that symptoms of PGD were associated with high levels of emotional closeness to the lost person and with a perception of the death as highly sudden. Moreover, religiosity remained significant and gender became significant when death-specific variables were added. Women displayed more severe prolonged grief symptoms compared to men. This final model accounted for 56.0% of the variance in explaining severity of PGD.

<table>
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<tr>
<th>Variable/Model</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>B</th>
<th>SE</th>
<th>B</th>
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<td>−0.13</td>
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<td>4.81*</td>
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<tr>
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<tr>
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Note: 0=coded 0; 1=coded 1. *p<.05. **p<.01. ***p<.001.
DISCUSSION

The present study found that 10% of the interviewed German community sample who had experienced the death of a first-degree relative met diagnostic criteria for a PGD and a MDE, respectively, with a mean of six years after the grief-related loss. PGD syndrome was strongly associated with depression and there was some overlap between PGD and depression. This questions the suggestion that PGD constitutes a separate diagnostic entity and implies that more research is needed before final conclusions can be drawn. Risk factors associated with symptoms of PGD included female gender, measures of religiosity, perceived emotional closeness to the deceased, and sudden and unanticipated loss. The results demonstrate that grief-related suffering may endure even years after the loss and that the evaluation of potential risk factors associated with this suffering might contribute to ameliorate treatment programs.

A number of studies have investigated prolonged grief reactions in different bereaved populations and have found PGD rates ranging from 12% to 43% (Goldsmith et al., 2008; Hargrave et al., 2012; Tomarken et al., 2012). Our rate of PGD of 10% is in line with the results of Kersting et al. (2011), who reported a prevalence rate of 7% in a German sample 10 years following the loss. The mean of the prolonged grief score in the present study was 22. This is lower compared to other studies using the same instrument, which reported an average grief score of 27 (Tomarken et al., 2012) and 29 (Boelen, 2011), six months to three years post-loss.

Several studies have supported the distinctiveness of PGD as a cluster separate from other psychiatric disorders. In a series of factor analytic investigations, researchers were able to differentiate a grief-specific symptom factor from bereavement-related depression (Boelen & Prigerson, 2007; Dillen et al., 2009). Substantial associations between PGD and depression have been reported (Boelen, 2011; McCarthy et al., 2010; Schaal, Elbert, & Neuner, 2009). We found no perfect overlap between PGD and depression in our study. Although there was a substantial association between depression and PGD, only three persons (50.0%) of the PGD cases also presented with MDE. This suggests that the mental illness of this group might have gone undetected by the sole reliance on depression diagnosis. Obviously, some grief-specific symptoms may appear irrespective of depressive symptoms. There has been evidence that the symptom cluster of separation distress presents a grief-specific dimension that may arise unrelated to depressive symptoms (Schaal, Dusingizemungu, Jacob, Neuner, & Elbert, 2012).

As a further goal, we applied a three-step hierarchical regression analysis to examine risk factors for PGD. Whereas the control variable of age was unrelated to PGD reactions in all three models, the control variable of female gender only became significant in the last model, after the variables of religiosity and death-specific variables had been added. Most studies examining the associations between mental distress and religiosity did not differentiate between religious beliefs and religious activities. The present study measured religiosity with the help of three indicators: (a) religious beliefs, (b) satisfaction with one’s religious beliefs, and (c) religious activities. We found that high levels of religious beliefs were associated with more severe symptoms of PGD, high levels of satisfaction with one’s religious beliefs were protective for the development of prolonged grief symptoms and that religious activities had no significant influence on grief adjustment. The results suggest that not one’s religious beliefs per se but rather the personal satisfaction individuals find in these beliefs may be important for grief adjustment. It is possible that those bereaved who passively believe or hope consistently feel disappointed in their beliefs and might be stuck in their mourning process. Although religion is usually seen as beneficial for the bereaved, the empirical evidence is less clear. A number of studies have shown that not all survivors are aided by religion, suggesting perhaps that it is not relevant as a specific coping strategy (Goldsmith et al., 2008; Wijngaards-de Meij et al., 2005). In line with other studies (e.g., Brown et al., 2004), we found that religious activity was not related to a better grief adjustment. It may be that other sources of social support are more important. Our results suggest that the personal satisfaction individuals find in their beliefs is associated with coping processes that are related to better adjustment. It is also possible that those who are satisfied with their beliefs and their lives were more able to find an acceptable explanation for the loss. This might have helped them to make sense of and find benefit in the loss experience, factors that have been found to be associated with decreased complications in grieving (Holland et al., 2006).

The finding that those participants who reported high levels of emotional closeness to the deceased had significantly higher prolonged grief scores than those who reported lower levels of emotional closeness is congruent with the results of Servaty-Seib and Pistole (2006), who demonstrated that high levels of emotional closeness are related to the severity of grief symptoms. These findings suggest that a close emotional attachment to the deceased is more difficult to overcome and puts the bereaved at risk for prolonged grief reactions. On the other hand, it is also possible that those persons who reported a close emotional relationship were displaying more insecure attachment styles, traits which have been found to be associated with more severe grief reactions (van Doorn, Kasl, Beery, Jacobs, & Prigerson, 1998).

We found that the perceived suddenness of the loss is a significant predictor of prolonged grief severity. This is
consistent with other studies that have shown that unexpected death and lack of preparedness for the death were associated with higher levels of grief than an expected death (Goldsmith et al., 2008; Wijngaards-de Meij et al., 2005). Several factors could account for this finding. It could be that the unanticipated and sudden loss destroy feelings of safety and abruptly invalidate all previous beliefs. Experiencing death without any forewarning might evoke a feeling that there is no situation which feels secure and that another major loss might reappear, thus limiting the adaptive capacities (Wijngaards-de Meij et al., 2005; Rando, 1987). Feelings of one’s own lack of preparedness may reflect difficulty acknowledging and accepting a permanent separation from a loved one and may therefore be related to complications to adjust. Researchers have shown that those who expect the death of a loved one generally begin to experience grief prior to the actual death, a phenomenon called anticipatory grief, which has been found to have salutary effects (Rando, 1983). Our results suggest that perceptions of the death and feelings of lack of preparedness for it may be indicators of persons at risk of developing symptoms of PGD.

Contrary to expectations, the present study found that the amount of time since the loss (measured in years) was not significantly associated with symptoms of prolonged grief disorder. A large number of studies that examined differences in grief reactions within a relatively short period after the loss reported that time since the loss did not significantly impact the severity of prolonged grief symptoms or PGD diagnosis (Holland et al., 2006; Prigerson et al., 2002). Other researchers have found that grief reactions and coping may even worsen over time (Rando, 1983; Servaty-Seib & Pistole, 2006). Our study showed a substantial variability in time since the loss, with a mean of six years post-loss, and still found no significant association between the time since the death and the severity of prolonged grief symptoms. This is congruent with other studies that have demonstrated that symptoms of grief may continue up to at least five years (Kowalski & Bondmass, 2008). It seems that grief does not lessen in all cases over time and that the attachment or bonding to the lost person and the emotional closeness felt to that person might be more important than the mere passing of time.

Our study has several limitations. There were no pre-event measures available. Study findings were based on retrospective ratings of perceptions of the death. Furthermore, it is possible that those most affected by the loss were less willing to participate in this study. However, it would not be plausible to assume that we overlooked those who fulfilled PGD but not depression criteria. The cross-sectional nature of the design limits causal and temporal inferences concerning the precise relationships between the predictors.

The results of the present study have several implications for the clinical practice. Therapists working with bereaved persons should include the assessment of loss experiences, even when they had occurred years ago, as grief-related suffering and symptoms may persist across extended time periods. The individual perceptions of the circumstances of the death (e.g., the perceived suddenness of the death) and the bonding to the lost person may have a greater impact on the adjustment to life after the loss than the particular circumstances of the death. Therapists may use strategies that focus on the identification and reinforcement of the personal satisfaction that individuals find in their religious beliefs, as these have been found to be important coping processes that are related to better adjustment. This may help the bereaved to find sense in the loss and encourage the bereaved to re-engage in life without the deceased.

REFERENCES


